

### Claims

1. (Previously Presented) An isolated polypeptide comprising:

- (1) at least eight consecutive amino acids of amino acids 157-933 of SEQ ID NO: 1, wherein the isolated polypeptide is eight to ten amino acids in length and binds a Major Histocompatibility Complex (MHC) molecule; or
- (2) the amino acid sequence set forth as SEQ ID NO: 1.

2. (Canceled).

3. (Canceled).

4. (Currently Amended) The isolated polypeptide of claim 1, comprising ~~the~~ at the least eight consecutive amino acids of amino acids 157-933 of SEQ ID NO: 1, wherein the isolated polypeptide is eight to ten amino acids in length and binds an MHC molecule.

5. (Original) The isolated polypeptide of claim 1, comprising an amino acid sequence as set forth as SEQ ID NO: 1.

6. (Canceled).

7. (Currently Amended) An isolated ~~nucleic acid sequence~~ polynucleotide comprising the nucleic acid sequence as set forth as SEQ ID NO: 2, or a degenerate variant thereof.

8. (Previously Presented) The isolated nucleic acid sequence of claim 7, operably linked to a promoter.

9. (Previously Presented) An expression vector comprising the nucleic acid sequence of claim 7.

10. (Previously Presented) An isolated host cell transfected with the nucleic acid sequence of claim 7.

11. (Previously Presented) The isolated host cell of claim 10, wherein the host cell is a mammalian cell.

12-20. (Canceled).

21. (Withdrawn and Currently Amended) A method for detecting a prostate ~~cancer~~ cell in a subject, comprising

detecting the expression of the polypeptide of claim 1 in a sample from the subject, wherein an increase in the expression of the polypeptide as compared to a control indicates the presence of the prostate cell ~~cancer~~.

22. (Withdrawn and Currently Amended) The method of claim 21, wherein detecting the expression of polypeptide comprises detecting a polypeptide ~~having a~~ consisting of the amino acid sequence set forth as SEQ ID NO: [[2]] 1 in the sample.

23. (Withdrawn) The method of claim 22, wherein detecting the expression of the polypeptide comprises

contacting the sample with an antibody that specifically binds the polypeptide for a sufficient amount of time to form an immune complex; and  
detecting the presence of the immune complex.

24. (Currently Amended) A method for detecting prostate cells ~~a prostate cancer or prostate tissue~~ in a subject, comprising

detecting expression of the polynucleotide of claim 7 in a sample from the subject, wherein an increase in the expression of the polynucleotide as compared to a control indicates the presence of the prostate cells ~~prostate cancer or the prostate tissue~~.

25. (Previously Presented) The method of claim 24, wherein detecting the expression of the polynucleotide comprises detecting mRNA in a Northern Blot analysis, an RNA Dot blot, or a reverse transcriptase polymerase chain reaction (RT-PCR) assay.

26. (Currently Amended) A method for producing an immune response to the ~~against a~~ cell-expressing a polypeptide of claim 1 ~~in a subject~~, the method comprising administering to ~~[[the]]~~ a subject ~~a therapeutically~~ an effective amount of the polypeptide of claim 1, ~~or a polynucleotide encoding the polypeptide~~, thereby producing the immune response to the polypeptide.

27. (Canceled).

28. (Currently Amended) The method of claim 26, wherein the immune response ~~[[is]]~~ comprises production of antibodies ~~a B-cell response~~.

29-38. (Canceled).

39. (Previously Presented) A composition comprising the polypeptide of claim 1 in a carrier.

40-47. (Canceled).

48. (Previously Presented) A fusion protein, comprising

- a) the polypeptide of claim 1, wherein the polypeptide consists of at least eight consecutive amino acids of amino acids 157-933 of SEQ ID NO: 1, wherein the isolated polypeptide is eight to ten amino acids in length and binds a Major Histocompatibility Complex (MHC) molecule; and
- b) a heterologous polypeptide.

49. (Previously Presented) An isolated polynucleotide encoding the polypeptide of claim 47.

50. (Previously Presented) The isolated nucleic acid sequence of claim 49 operably linked to a promoter.

51. (Previously Presented) An expression vector comprising the nucleic acid sequence of claim 50.

52. (Previously Presented) An isolated host cell transfected with the nucleic acid sequence of claim 50.

53. (Previously Presented) The isolated host cell of claim 52, wherein the host cell is a mammalian cell.

54. (Currently Amended) ~~The An isolated polypeptide of claim 1,~~ consisting of the amino acid sequence set forth as amino acids 157-933 of SEQ ID NO: 1.

55. (Currently Amended) ~~The An isolated polypeptide of claim 54,~~ consisting of the amino acid sequence set forth as one of SEQ ID NO: 3-10.